TAILORING HIGHER EDUCATION IN KENYA TO THE DEMANDS OF THE POSTINDUSTRIAL WORK PLACE.

Catherine A. Amimo

University of Eastern Africa, Baraton

School of Education P.O Box 2500-301000 Eldoret, Kenya

Mobile No; +254-734-225414 E-mail: amimoc2002@yahoo.com: amimoc@ueab.ac.ke

Abstract

The unemployment rate and the disappearance of certain jobs in the Kenyan work place is a major concern that needs urgent attention. This paper does not necessarily focus on labor market analysis or how to improve graduate employability, but rather attempts to present an anthropological description of the contemporary work place, a reality that most educators may not be familiar with. It reveals the new patterns in organizational structures with a focus on customization and globalization; and stress on the demand for design rather than mass production that characterized the traditional work place. Implications for individual workers and challenges to higher education in terms of academic screening, the curriculum specificity, the basis of education and schooling are discussed. The paper stresses the importance of understanding the changing requirements for today's laborers as this has important implications on higher education in terms of skills, training and capacity. Specifically, educators are asked to respond to the question "What does it feel like to produce graduates whose employment is not guaranteed? This question is foundational and intentionally asked in this paper to awaken the responsibility and imagination of educators, for without a sense of responsibility and imagination the gross problem of unemployment of the Kenyan graduates will not be solved.

Key Words: Higher Education, Post-Industrial Work place, Unemployment, Liberal Education.

Introduction

This paper is premised in the thought that the fundamental responsibility of any institution of higher learning is to identify and provide solutions to societal problems. Unemployment being one of the greatest ills of society today, deserves the attention of university scholars in Kenya and else where. This paper attempts to articulate the state of unemployment of graduates in Kenya. It reveals the new patterns in organizational structures with a focus on customization and globalization; and stress on the demand for design rather than mass production that characterized the traditional work place. The paper addresses implications for individual workers in terms of the types of jobs available and the generic skills required, and challenges to higher education in terms of academic screening, curriculum specificity, and the basis of education. Emphasis is made on the importance of understanding the changing requirements for today's work place and implications on higher education in terms of skills, training and capacity. The paper recommends a liberal arts education.

The State of Unemployment of Kenyan Graduates

What does it mean for our universities to produce graduates whose employment is not guaranteed? According to the report, ILO Global Employment Trends for Youth 2010, out of the world's 620 million economically active youth, aged between 15 and 24, about 81 million were unemployed at the end of 2009. This is the highest number recorded in history. The report estimates that the youth unemployment rate had increased from 11.9 percent in 2007 before the global financial crisis and was now more than 13 percent at the end of 2009.

Records in the Ministry of Youth and Sports show that there are only 125,000 young people (18-35years) registered with formal employment nationwide, among Kenya's population of nearly 40 million: and the majority are graduates. Muthee (as cited by McEnrue, 2011) puts the unemployment rate for youth 15-35 years old at 65%. According to chief economist and director of research and education at the Central Organization of Trade Unions—Kenya, COTU-K new graduates struggle to find jobs because they still

lack the necessary skills to compete in some markets. Therefore, unemployment is not only resulting from lack of jobs but inadequacy of the educational infrastructure (Nesoba, 2010; Mwirigi, 2011). This trend has been picking up from the early 1970s, especially among the arts graduates when the word 'tarmacking' (job hunting) was coined to describe the situation that has now escalated (Bogonko, 1992). To put the problem of unemployment into perspective, let us look at new patterns of organizational structures of the work place, the available jobs and the generic skills required in contrast to what higher education in Kenya offers today.

New Patterns of Organizational Structures of the Work Place

The changes in the 21st century work place are best revealed in the new patterns of the organizational structures common to most companies today. As Cheng (2007) points out, unlike the traditional large industrial enterprises, the modern companies vary from small to medium in size with a minimal number of employees. This is not only the case of countries like Hong Kong with typically smaller service economy, but also the United States with a much larger economy (U.S Census Bureau 2007, as cited by Cheng, 2007); and the trend is spreading globally to countries like Kenya. The change in the average company size correlates with the general shift from the large production to increasingly customized products and services. Customization here means that products and services are tailored to the unique needs of customers. Cheng suggests that with customization the diversity of products increases while the demand for each product decreases. When services are customized the transactions are more direct and there is no need for the traditional large organizations, hence the shrinking of some jobs and emergence of others.

A typical example in Kenya is the banking system which used to have many cashiers to take care of deposits and withdrawals. Over the years these banks have created and developed customized services through receptionists, individualized tables and ATM machines relegating the cashier counters to the back office or replacing them all together. There is also a multiplicity of umbrella organizations with branches within and across the Kenyan border controlled by the same parent group. For instance, the Nakumatt supermarket and Bata (shoe industry) are spread in every town in Kenya and across into

neighboring countries like Uganda; and every branch is equipped with some very unique products and services. These patterns reflect a theme common to the changes in traditional productions and goods. Indeed, this new pattern of organizations carries with it aspects of globalization and the "vision 2030" (National Economic and Social Council of Kenya, 2007).

There are major shifts in the global market place, especially with the use of computers. Rule based jobs that require deductive thinking and easily recognizable patterns are easily taken up by computers, or outsourced to workers in another country, or both (Levy & Murnane, 2007). However, Levy and Murnane reject the fact that computers will finally replace human labor; they spot such unique human skills, intellectual and emotional capabilities in the category of expert thinking and complex communication that can never be supplanted by computational technologies. Unfortunately, today's pedagogical practices at our universities are short of these much needed skills. They rather focus on what Einsner (1979) termed as associative reasoning, a serious handicap to skill development. This is the kind of reasoning that is resonated and, therefore, lacks originality and creativity.

No wonder, a significant number of graduates can not easily find jobs, and are often forced to compete for lower skilled jobs. This especially applies to jobs with an international focus. Manda and Sena (2004) used both industry-level and firm-level data to examine some of these effects on employment and earnings in the Kenyan manufacturing sector, and found that the overall effects of international trade on manufacturing employment was negative in the 1990s (a trend that spills over into the millennium). Their firm-level analysis indicated that less skilled workers experienced losses in earnings, and that the inequality in earnings between skilled and unskilled workers had increased. This finding has serious implication on the preparation of graduates for the job market.

Globalization has also created a new situation in which the mode of production is in knowledge generation, information processing, and symbol communications as opposed to the industrial mode that was based on production of energy. In fact, Lash (2007) posits that the logic of manufacturing is getting displaced by the logic of information (as cited by Roth & Gur-Ze'ev, 2007), and the central position of information will now dictate the competencies required of the labor force. There is also a shift

from top-down to lateral management. Instead of distributing work to a mass of laborers coordinated throughmiddlemanagementandseparatedepartments, organizations are operating around smaller working groups- typically the task forces, production teams and project groups.

Procedures, rules and regulations are replaced by exercise of autonomy and self governance (abilities in acting ethical and principled). Workers do not, strictly, specialize, but contribute through integration of different talents, expertise and experiences. This collaborative team effort places a new premium on communication, a skill that should be emphasized in higher education curriculum (Cheng, 2007). In post industrial work place there is, notably, much more need for design as opposed to production, resulting in increased demand for designers. Subsequently, decrease in the demand for front-line laborers (bluecollar jobs). As mentioned earlier, service industries have become customized and direct; meaning that the front –line worker now bears the responsibility of design, problem solving and decision making; qualities that are lacking in our Kenyan graduates (Mwigiri, 2011).

Available Jobs and Skills Required in Preparation for the Work Place

With all these major shifts at the work place, it is important to study the job market to find out the kind of jobs that will be available for our graduates in the post industrial era. From the World Bank report, Kenya's gross domestic product by sector is agriculture (22%), services (62%) and industry (16%). This suggests that most jobs are available in the service sector (World Bank, 2010). Levy and Murnane (2007) observed a similar trend in the United States of America, though their study also cited growth in sales, professional, managerial and technical occupations. Their argument is that service occupation can not be taken up by computers because it requires optical recognition and many physical movements that can only be done sufficiently by human beings.

The sales market also requires complex exchanges of information that can only be carried out by human beings. In addition, professional, managerial and technical occupations involve higher human cognitive skills such as formulating and solving new problems, exercising good judgment and creating new products and services. This explains the current shrinking of jobs for unskilled workers, and limitless

space in freelancing and entrepreneurship (McEnrue, 2011). These changes, clearly, show that human interaction is a central element of contemporary workplace dynamics. As such, there is need to develop generic skills such as competencies that entails to presentations, negotiation, brainstorming, persuasion, debates and arbitration, capacities for decision making, problem solving, critical thinking, team work and integration, flexibility in dealing with personal differences and conflicts, ethical and socializing and networking, emotional stability, confidence and self- reflection (Cheng, 2007). The 21st century worker is required to work smarter, not harder! Thus, the prospective graduates need more than training in their specializations in order to fit in the job market (Humphrey & Stokes, 2000).

Challenges and Implications for Higher Education in Kenya

Looking at the jobs available and the generic skills required upon graduation, are our universities preparing students for a successful integration into the job market? To larger extent no! The Kenyan higher education system still nurses "platonic" views, inherited from the British colonial masters, as seen in higher cut marks that give only a few students a chance to get a university education, hence a good job. The Kenyan curriculum is structured in a way that classifies and ranks students rigidly to fit in the old patterns of the colonial psychology. Its very sequence of 8-4-4 (meaning eight years of primary education, four years of secondary education and four years of university education) subjects one to be in school much longer and pay much more, especially at tertiary level. This pattern is copied from North American education. D'Souza (1987) compares the four years spent by the American graduates with British three years of tertiary education and still finds the later more affordable and superior in standards.

During the first eight years which culminate into a national exam Kenya Certificate of Education (KCPE) emphasis is on the basic skills of Writing, Reading, Arithmetic and Social Education. The secondary school curriculum, though aimed at improving the above named basic skills, is more subject centered than skill oriented as evidenced in its pedagogy and the three volumes of the syllabus as follows- volume one; English, Kiswahili, Arabic, French, German and Physical Education; volume two has Mathematics, Physics, Chemistry, Biology, Agriculture, and Home Science; and volume three

contains History and government, Geography, Business Studies, Christian Religious Education and Hindu Religious Education. Students take a minimum of seven subjects in which they are examined at the end of the four years in the Kenya Certificate of Secondary Education (KCSE) (Ministry of Education Secondary School Syllabus, 2010).

The exam which mainly tests cognitive skills only permits a few students to join university as there is scarcity of space. At the university students specialize in different disciplines in the categories of humanities, Sciences, Education, Medicine, Nursing, Engineering, Business Education, Architecture and Law- to mention a few. University education being the panacea for a good job is recently rising in demand leading to mushrooming of university extensions in most of the Kenyan towns. This scenario of higher education expansion has compromised quality of graduates, and is a serious concern to employers.

The process of job-predestination is supported by outdated assumptions that there are smart and dumb kids (not everybody can learn), knowledge is the standard measure for intelligence, qualification pyramid in education matches the man power pyramid in society (at all times), people should have occupational identity, knowledge is divided into disciplines and specialization is an indicator of a person's intellectual level (Bogonko, 1992; Cheng, 2007). These assumptions are discredited by the current theories that dictate operations at work places. For example the assumption that knowledge is a standard measure for intelligence is challenged by Gardener's (1983) theory of multiple intelligences.

According to this theory human beings have eight intelligences; linguistic, logical mathematical, spatial, bodily- kinesthetic, musical, interpersonal, intrapersonal and naturalistic. An individual can be stronger in more than one area, thus preparing them for strict occupational identity or dismissing others for academic failure is wrong. Meaning, university education should go beyond the current mosaic structure and focus on broader themes that embrace multiple intelligences in each of the learners. In the words of Mansila and Gardner (2007), the post industrial education systems call for a distribution of areas and levels of expertise in which trained teacher-brokers are used.

This whole process demands for the development of more generic capacity, and as Moisio and Suoranta's (2007) stress all "people must be provided with opportunities to develop skills in

multiple literacies" in order to maintain hope in their lives p. 237. The duo pursue the concept of hope in pedagogical freedom by asserting that students and educators should be given the autonomy to cooperate in multidisciplinary approaches that open up "thinking spaces" so that they can develop critical understanding. They argue that:

The way to do this is to give students more possibilities to participate in the planning processes... spaces other than the lecture halls and classrooms to practice. This informal learning includes news papers, radio stations, and various forms of independent media, as well as possibilities for voluntary work... a chance to 'go public' to grow up as public and transformative intellectuals with critical and hopeful minds (p. 243).

White (1952) believed that every human being "is endowed with a power akin to that of the creator-individuality, a power to think and do. It is the work of true education to develop this power, to train the youth to be thinkers, and not mere reflectors of other men's thought" p.17. She stresses that the youth should be taken beyond that which men have said or written; be directed to the sources of truth, to the vast fields of research so that they contemplate the great facts of duty and destiny. Dialogue and collaborative learning through research must be the key factors in preparing creative, innovative graduates; with complex communication and social skills needed for today's work place.

From this perspective lies the crucial need for the university education to embrace some informal structures that characterize the African civilization. Our strict adherence to the formal education as it was given by the colonial government, will not allow us to practically deal with the "Kenyan problems", and create "the Kenya we want". Efforts towards emancipation and reformation- as visualized in the vision 2030 and the Millennium Goals, can only be achieved in the Kenyan context, particularly in our universities, where we have top academicians and researchers- who must begin to look at the curriculum content of their subject areas within the context of the most critical problems of the Kenyan societyignorance, poverty and disease (Bogonko, 1992; Mwigiri, 2011). The professors must consider how to bring about a just, cohesive and a people oriented democracy. For now the Vision 2030 is just but a mirage, for we still glorify in the colonial cognitive formality- focusing on knowledge transmission rather than configuration (creation) and dissemination. Lumumba (2011) calls for cross-pollination and fertilization of ideas so that we are able to subdue the earth before it subdues us.

On a sad note, this is not happening; Mwigiri (2011) observes that" students who are products of Kenya's formal education are not able to develop and use original, inventive, innovative and entrepreneurial competencies"-that in cooperate cross-pollination and fertilization of ideas. In fact research shows that entrepreneurship is not robust in the Kenva higher education curriculum. As McEnrue (2011) cautions, serious ethnic attitudes must be addressed before entrepreneurship can be accepted as an alternative source of education and employment in Kenya. Nafukho and Muyia (2009), some of Kenyan top professors, believe that if entrepreneurship picks up it can be a strategic approach in addressing the unemployment problem among university graduates in Kenya and Africa in general.

In line with the service and technological needs of the post industrial work place, Kenyan universities need to create a balance between service and technological oriented disciplines (such as Business Education, Education, Information Technology, Family and Consumer Sciences, Psychology, Health Sciences and other related courses) and traditional disciplines such as History, Physics, Geography and Theology. It is in this balance that a properly designed liberal arts education cohabits with technological skills and practical services to produce employable graduates. After all, the chief purpose of education is to prepare the student for service for the joy of service in this world and the world to come (White, 1952). Universities that have realized this purpose are already redesigning their courses to capture this blend.

Liberal Arts, Service Education and Technology: The Way to Go

Okeda (2011) in a TV interview on "Managing Generation Y at the Work Place", advised on the need for partnership and mentoring collaborations between mother universities and the work places; to nurture potentialemployeesandthenewlyemployedgraduates. Such programs should stress tacit knowledge, civic education, moral education, emotional intelligence and soft skills, internship programs, authentic assessments, learning communities, and problembased learning. The dynamic nature of the work place requires such life long education, especially in management of information (Moisio & Suoranta,

2007). All these point to the need for broad based human development (capacity building). This was, and still is, the original purpose of education. In fact, true education is "the harmonious development of the physical, the mental and the spiritual powers" (White, 1952, P. 13). Dewey long ago, pointed out to this, when he said that "a democratic criterion requires us to develop capacity to the point of competency to choose and make ... own career" (Dewey, 1916, p. 119 cited in Eisner, 1979).

Unfortunately, some fourth year students in our universities are still incapable of making sensible vocational choice. Some graduate and keep changing jobs. To solve this problem, universities need to establish career centers where students can learn about their aptitudes and interests, course offerings and make comparisons with market demands. Such programs should also help students on job related experiences- job search, writing vitas, and preparing for interviews. Holmes (1997) recommends liberal arts education, for it has this kind of setting. He argues that liberal education has the advantage of a broad-based curriculum that offers more transferable skills, richer personal qualities and long lasting values that are important for career preparation and general service. He further observes that "the same understanding, skills, and values that constitute career preparation make good life preparation as well" p. 41. Therefore, if our universities will adopt some elements of the liberal arts education, the society will benefit analogously in terms of relevant man power and good citizenship.

However critics of liberal education are of the opinion that it can contribute little to the development and transformation of society if there is over-attention to the subject matter. The advice is for higher education providers to strike a middle ground curriculum, in which the students' respond authentically, and find their own voices in practical aspects of the society- through research, service education, community outreach, and collaborative projects. In fact Kent State university, in US, has designed a degree specialty that is not so studio intensive but serve students who want to work in the design industry, thus catering for the market demand (D'Ambrosio & Ehrenberg, 2007). After all higher education is versatile, a social institution and industry. In this sense practical service and technological skills are blended in liberal arts education, in a way referred to as "the conversation of mankind". This conversation that started in the primeval forests and extended, should not just be a simple narration as presented in liberal arts, but be made more articulate in higher education through acts of logical, critical and reflective conversations (Roth & Gur-Ze'ev, 2007). Initiation into this kind of conversation symbolizes the liberating act of education which should help the universities in bringing socio-cultural transformation to the society in away that meets the exigencies of the market

Conclusion

In view of the changes in the post industrial work place educators should "practilize" their curriculum in order to produce graduates who will fit in the world of work. Successful reform calls for partnership with external stakeholders including government and the private sector. Institutions of higher education can establish partnerships with business and industrial sectors of the economy. Students can benefit from training programs like internships, workplace seminars, and symposia gaining workplace insights and mindset, which will be beneficial in their prospective careers. The preparation and training of graduates should not only be restricted to making them suited to the postindustrial workplace as employees with employable skills, but in engendering in them entrepreneurial and business acumen as (self)-employers, who would be the engine of growth of the Kenyan economy. The courses must have both technical and practical relevance, that arouse in learners cognitive, affective and physical abilities that permit them to be expert thinkers, designers, and principled individuals. University education should, in deed, provide opportunity for student's personal development in terms of; a passion for nature, a commitment to society, perseverance, familiarity with other cultures, a sense of justice, belief in equal rights and tolerance of diversity at work place as they compete globally. Remember, the process of learning at our universities should empower students to work smarter not harder!

References

- Bogonko, S. (1992). Reflections on education in East Africa. Nairobi. Oxford University Press.
- Cheng, K. (2007). The post industrial work place and challenges to education. In Suarez-
- Orozco, M. (2007). Learning in the global era: International perspectives on globalization and education. California, CA: University of California Press.

- D'Souza, H. (1987). Kenyan education in its African context. New York: NY, Vantage Press.
 D'Ambrosio, M. & Enhrenberg, R. (2007).
 Transformational change in higher education:
 Positioning colleges and universities for future success. Cheltenham, UK: Edward Elgar.
- Eisner, E. (1979). The educational imagination: On the design and evaluation of school programs. New York: Macmillan.
- Humphrey, B., & Stoke, J. (2000). *The 21st century supervisor: Nine essential skills for frontline leaders*. California, CA: Jossey-Bass.
- Levy, F., & Murnane, R. (2007). How computerized work and globalization shape human skills demands. In Suarez-Orozco, M. (2007).

 Learning in the global era: International perspectives on globalization and education.

 California, CA: University of California Press.
- Lumumba, L. O. (2011). *Millennium development goal's focus*. Key note address at the 7th Annual International
 Conference at Moi University: Knowledge Creation and Dissemination for the Realization of the Millennium Goals, 6Th-10th September, 2011.
- MacEnrue, M. (2011). *Technological innovation: The* establishment of biotech enterprises in Kenya. A paper presented at International Conference on Small Business
 Stockholm, Sweden June 15-18.
- Mansila, V., & Gardner, H. (2007). From teaching globalization to nurturing global consciousness. In Suarez-Orozco, M. (2007). Learning in the global era: International perspectives on globalization and education. California, CA: University of California Press.
- Manda, D., & Sen, K. (2004). The labour market effects of globalization in Kenya. *Journal of International development, 16 (1)* 29-43.
- Moisio, O., & Suoranta, J. (2007). Hope and education in the era of globalization. In Roth, K., & Gur-Ze'ev (2007). Education in the era of globalization. Dordretch, Netherlands: Springer.
- Nafukho, F., & M. Muyia (2009). "Entrepreneurship and Socioeconomic Development in Africa: A Reality or Myth?" *Journal of European Industrial Training*, *34(2)* 96-109.

- National Economic and Social Council of Kenya. (2007). Kenya Vision 2030. Republic of Kenya. Nairobi, Kenya.
- Nesoba, D. (2010). Youth uunemployment crisis continues, millions of college grads flood unemployment lines. Retrieved June 13, 2011, from http://www.globalpressinstitute.org/print/430
- Mwirigi, L. (2011). Why we need to adopt informal education practices in the management of formal education systems. Retrieved June 13, 2011, from http://ezinearticles.com/?Why-We-Need-To-Adopt-Informal-Education-Practices-In-The-Management-Of-Formal-Education-Systems&id=6118428
- Okeda, J. (2011). *Generation "Y": Managing them at work place*. Lifestyle NTV channel June 27, Monday 2011.
- World Bank. (2010). "Country indicators."

 Retrieved June 14, 2011. From http://data.worldbank.org/.

 Ministry of Education, Science and Technol